Kenya Internet Exchange Point (KIXP)

Presented at 1st KIXP Peering Members meeting
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Background

• The KIXP was established in 2000 by the Kenya ISP Association TESPOK
• Established as a non-profit entity
• Probably the only Regulator Licensed IXP in Africa
• Initially had 4 ISPs exchanging traffic
• Currently there are 23 peering members
Objectives

- Keeping Kenyan Internet traffic local
- Enhance the Internet experience of users
- Reduce overall costs related to providing Internet services
- Promote and encourage the creation of local content
- Create Internet opportunities
- Build technical capacity
Achievements

- On Valentine’s day we celebrated 5 years of operational stability of the KIXP.
- Prior to its establishment all local traffic was exchanged in Europe & USA.
- Reduced the latencies from over 1200ms to less than 100ms for local content.
- Reduced monthly costs for Inter ISP transit from US$ 3375 to less than US$200 for a 64Kbit/s local loop Circuit.
Achievements ...(Cont’d)

- ISPs Savings resulting from need to upgrade international capacity links - an estimate 30% of ISP traffic was local
- Attracted Government participation through the Kenya Revenue Authority Simba System
- Improved connectivity through Fiber Optic and high speed wireless (FSO) connectivity
KIXPs Peers ...present

• ccTLD Root Server - .KE
• F, J, .Com & .Net Root Servers mirror Instances
• GPS based Network Time Source Server
• 16 ISP's Networks
• 3 Internet Backbone & Gateway Operators
• Multi-media Service providers
• Government – Revenue Authority
• Education & Research Network (NREN)
coming soon...(Cont'd)

- GSM Operators - GPRS/3G Services
- Academic Networks - E-learning
- Local Loop Operators (LLO's) - Voice/data
- Content hosting providers - e-business
- More of Government - e-government
- Multi-media Service providers - sms/gaming
Housekeeping Projects

- Topology Changes to meet demand and cater for emerging technologies
- Policy Changes to accommodate new membership groups
- Policy changes to introduce collocation services
- Technical Specification to provision for transit services
- Enhancement of policy to address code of conduct for IXP members
Normal Traffic Stats
Unusual traffic days
Annual Growth 2004 - 2005

- Feb 2004: 900 Kbps
- Feb 2005: 1,600 Kbps
- Annual growth rate: 77.8%
Annual Growth 2005 - 2006

- Feb 2005: 1,600 kbps
- Feb 2006: 3,800 Kbps
- Annual growth rate: 137.6%
Annual Growth 2006 - 2007

- Feb 2006: 3,800 kbps
- Feb 2007: 8,000 Kbps
- Annual growth rate: 110.5%
Growth Catalysts

- Increased awareness in ICTs
- Regulatory changes in the license structures/ regime
  - VoIP licensing to Service Providers
  - 3 tier licensing structure
- Governments’ adoption of e-governance a tool to enhance service delivery
- Vibrant Private sector
- Availability of technical capacity
IXP’s in Africa
Our Goals

• Attract both local and international Content providers & distributors to the KIXP
• Seek transit for our members via well established IXP’s like LINX, AMSIX, etc
• Interconnect East African IXPs through the EARPTO initiative
• Interconnect with the rest of African IXP’s through the ongoing AfriSPA project
Why the KIXP?

- Affordable Connectivity - 10 Mbs for Kshs. 50,000 Per Month
- 3rd Largest and fastest growing IXP in Africa
- Access to E.A Countries i.e UG, TZ and RW
- Stable and robust local Infrastructure
- Multiple International VSAT providers
- Political Support & Stability
Conclusion

- There lies a huge potential for e-business to be tapped in Africa and...

- KIXP presents that opportunity to join in the Internet revolution in Africa

- Opportunity to contribute in the development of ICT’s in the continent.

- Get to experience, export the rich African Culture and Content online

- This will lead to a balance in traffic patterns between Africa and the West
Thank you!